- Respiratory Tissue Layers
  - Mucosa
    - Respiratory Epithelium
      - PCCE with goblet cells joined apically by tight junctions, all cells contact basement membrane, 2-3 cell layers thick
      - Basal Cells (Do not reach surface, precursor cells, 30% epithelium)
        - Ciliated Columnar Cells → Motor for Mucociliary escalator, 30% epithelium, basal nuclei
        - Goblet cells → Unicellular glands, secrete mucinogen, 30% epithelium
        - Brush Cells → Narrow, columnar, microvillus border, replacement cell or sensory function, 3% epithelium
      - Small Granule Cells (DNES cells, APUD cells, Kulchitsky cell)
        - Secrete hormone and biogenic amines
        - Bronchial Carcinoid: 2-3% all pulmonary cancers, not related to smoking, 10x more common females, slow proliferation, confined to lobular bronchi
      - Serous Cells → Columnar, microvillus border, e- dense apical granules, secrete watery substance
    - Lamina Propria
      - Loose fibroelastic CT, interconnected but mostly longitudinal
      - Lymphatic Tissue, nodes, mast cells, plasma cells → IgE, IgA, IgG producers
      - Elasticc lamina separates Lamina propria from submucosa
  - Submucosa
    - Dense, Irregular fibroelastic CT, elastic fibers, smooth muscle cells
    - Mucous and seromucous glands and ducts
    - Rich vascular supply, some lymph
    - Blends with periosteum or perichondrium
  - Periosteum/ Perichondrium
  - Adventitia
    - Fibroelastic CT
    - Hyaline Cartilage Rings
    - Attaches resp tract to adjacent structures